Please amend the claims so that they read as follows:

1. (Canceled).

2. (Amended) ~~The optical recording medium according to claim 1, wherein~~ An optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising:

a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

a film formation layer provided with a concave-convex surface corresponding to the concave-convex portion which includes at least a recording layer over the main surface of the substrate; and

a light transmission flattening film having a transmittance to the irradiated light which is formed on the film formation layer through a hydrophilic material film;

wherein,

the concave-convex surface on a surface of the film formation layer is filled with the light transmission flattening film and is flattened and the substrate has a central hole,

the film formation layer having the recording layer is formed by setting, as a non-film formation region for the film formation layer, a central part region across a predetermined width around the central hole over the substrate; and

the hydrophilic material film is formed across the film formation layer and the non-film formation region of the central part region of the film formation layer.

3. (Amended) The optical recording medium according to claim ~~1~~ 2, wherein the light transmission flattening film is formed of a spin on glass.

4. (Original) The optical recording medium according to claim 3, wherein the spin on glass is formed of an inorganic material containing SiO_2 as a principal component and having a firing temperature of 150C or less.

5. (Amended) The optical recording medium according to claim ~~1,~~ 2 or 3, wherein the light transmission flattening film has a thickness of 400 nm or less.

6. (Amended) The optical recording medium according to claim ~~1,~~ 2 or 3, wherein the light transmission flattening film has a thickness of 100 nm or less.

7. (Amended) The optical recording medium according to claim ~~1 or~~ 2, wherein the hydrophilic material film is formed by sputter by using SiO_2 as a principal component.

8. (Canceled).

9. (Canceled).

10. (Original) The optical recording medium according to claim ~~1~~ 2, wherein the concave-convex portion has a land and a groove, and the information is recorded on the recording layer of either or both of the land and the groove.

11. (Canceled).

12. (Amended) ~~The method of manufacturing an optical recording medium according to claim 11, wherein~~ A method of manufacturing an optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising the steps of:

manufacturing a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out; forming a film formation layer having at least a recording layer;

forming a light transmission flattening film having a transmittance to the irradiated light and filling in a concave-convex surface generated on a surface of the film formation layer to flatten the surface; and

forming a hydrophilic material film on a surface where the light transmission flattening film is to be formed before the step of forming a light transmission flattening film and

the substrate has a central hole,

a non-film formation region for the film formation layer across a predetermined width around the central hole over the substrate at the step of forming a film formation layer having a recording layer; and

forming the hydrophilic material film across the film formation layer and the substrate of the non-formation region in the central part region of the film formation layer.

13. (Canceled).

14. (Canceled).

15. (Amended) The method of manufacturing an optical recording medium according to claim ~~11, 13 or 14~~ 12, wherein the light transmission flattening film has a thickness of 400 nm or less.

16. (Amended) The method of manufacturing an optical recording medium according to claim ~~11, 13 or 14~~ 12, wherein the light transmission flattening film has a thickness of 100 nm or less.

17. (Amended) The method of manufacturing an optical recording medium according to claim ~~11 or~~ 12, wherein the hydrophilic material film is formed by sputtering.

18. (Original) The method of manufacturing an optical recording medium according to claim 17, wherein the hydrophilic material film is formed by clamping an outer periphery of the substrate.

19. (Original) The method of manufacturing an optical recording medium according to claim 17, wherein the hydrophilic material film is formed of a film formation material containing SiO_2 as a principal component.

20. (Canceled).

21. (Canceled).

22. (Canceled).

23. (New) An optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising:

a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

a film formation layer provided with a concave-convex surface corresponding to the concave-convex portion which includes at least a recording layer over the main surface of the substrate; and

a light transmission flattening film having a transmittance to the irradiated light which is formed on the film formation layer through a hydrophilic material film;

wherein,

the concave-convex surface on a surface of the film formation layer is filled with the light transmission flattening film and is thus flattened,

the light transmission flattening film is formed of a spin on glass,

the spin on glass is formed of an inorganic material containing SiO_2 as a principal component and having a firing temperature of 150°C or less, and

the substrate is formed of polyethersulfone.

24. (New) An optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising:

a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

a film formation layer provided with a concave-convex surface corresponding to the concave-convex portion which includes at least a recording layer over the main surface of the substrate; and

a light transmission flattening film having a transmittance to the irradiated light which is formed on the film formation layer through a hydrophilic material film;

wherein,

the concave-convex surface on a surface of the film formation layer is filled with the light transmission flattening film and is thus flattened.

the light transmission flattening film is formed of a spin on glass.

the spin on glass is formed of an inorganic material containing SiO_2 as a principal component and having a firing temperature of 150°C or less, and

the substrate is formed of poletherimide.

25. (New) A method of manufacturing an optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising the steps of:

manufacturing a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

forming a film formation layer having at least a recording layer;

forming a light transmission flattening film having a transmittance to the irradiated light and filling in a concave-convex surface generated on a surface of the film formation layer to flatten the surface; and

forming a hydrophilic material film on a surface where the light transmission flattening film is to be formed before the step of forming a light transmission flattening film;

wherein,

the substrate has a central hole,

a non-film formation region for the film formation layer across a predetermined width around the central hole over the substrate at the step of forming a film formation layer having a recording layer,

forming the hydrophilic material film across the film formation layer and the substrate of the non-formation region in the central part region of the film formation layer, and

the light transmission flattening film is formed by spin coating.

26. A method of manufacturing an optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising the steps of:

manufacturing a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

forming a film formation layer having at least a recording layer;

forming a light transmission flattening film having a transmittance to the irradiated light and filling in a concave-convex surface generated on a surface of the film formation layer to flatten the surface;

forming a hydrophilic material film on a surface where the light transmission flattening film is to be formed before the step of forming a light transmission flattening film;

wherein,

the substrate has a central hole,

a non-film formation region for the film formation layer across a predetermined width around the central hole over the substrate at the step of forming a film formation layer having a recording layer,

forming the hydrophilic material film across the film formation layer and the substrate of the non-formation region in the central part region of the film formation layer,

the light transmission flattening film is formed by spin coating, and

the light transmission flattening film is formed of a spin on glass material containing SiO_2 as a principal component and having a firing temperature of 150°C or less.

27. A method of manufacturing an optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising the steps of:

manufacturing a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

forming a film formation layer having at least a recording layer;

forming a light transmission flattening film having a transmittance to the irradiated light and filling in a concave-convex surface generated on a surface of the film formation layer to flatten the surface; and

forming a hydrophilic material film on a surface where the light transmission flattening film is to be formed before the step of forming a light transmission flattening film;

wherein,

the substrate has a central hole,

a non-film formation region for the film formation layer across a predetermined width around the central hole over the substrate at the step of forming a film formation layer having a recording layer,

forming the hydrophilic material film across the film formation layer and the substrate of the non-formation region in the central part region of the film formation layer,

the light transmission flattening film is formed by spin coating,

the light transmission flattening film is formed of a spin on glass material containing SiO_2 as a principal component and having a firing temperature of 150°C or less, and

the substrate is constituted by an organic material, and the light transmission flattening film is formed by firing at 150C or less.

28. A method of manufacturing an optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising the steps of:

manufacturing a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

forming a film formation layer having at least a recording layer;

forming a light transmission flattening film having a transmittance to the irradiated light and filling in a concave-convex surface generated on a surface of the film formation layer to flatten the surface; and

forming a hydrophilic material film on a surface where the light transmission flattening film is to be formed before the step of forming a light transmission flattening film;

wherein,

the substrate has a central hole,

a non-film formation region for the film formation layer across a predetermined width around the central hole over the substrate at the step of forming a film formation layer having a recording layer,

forming the hydrophilic material film across the film formation layer and the substrate of the non-formation region in the central part region of the film formation layer,

the light transmission flattening film is formed by spin coating,

the light transmission flattening film is formed of a spin on glass material containing SiO_2 as a principal component and having a firing temperature of 150°C or less,

the substrate is constituted by an organic material, and the light transmission flattening film is formed by firing at 150°C or less, and

the substrate is formed of polyethersulfone.

29. A method of manufacturing an optical recording medium for carrying out at least one of record and reproduction of information by light irradiation, comprising the steps of:

manufacturing a substrate having a concave-convex portion formed on a main surface on a side where the light irradiation is to be carried out;

forming a film formation layer having at least a recording layer;

forming a light transmission flattening film having a transmittance to the irradiated light and filling in a concave-convex surface generated on a surface of the film formation layer to flatten the surface;

forming a hydrophilic material film on a surface where the light transmission flattening film is to be formed before the step of forming a light transmission flattening film;

wherein,

the substrate has a central hole,

a non-film formation region for the film formation layer across a predetermined width around the central hole over the substrate at the step of forming a film formation layer having a recording layer,

forming the hydrophilic material film across the film formation layer and the substrate of the non-formation region in the central part region of the film formation layer,

the light transmission flattening film is formed by spin coating,

the light transmission flattening film is formed of a spin on glass material containing SiO_2 as a principal component and having a firing temperature of 150°C or less,

the substrate is constituted by an organic material, and the light transmission flattening film is formed by firing at 150°C or less, and

the substrate is formed of poletherimide.